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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.				
10/617,113	07/10/2003	David Chown	871-011413-US/30020606 US	2606				
2512 PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824	7590 07/05/2007		<table border="1"><tr><td colspan="2">EXAMINER</td></tr><tr><td colspan="2">PASCAL, LESLIE C</td></tr></table>		EXAMINER		PASCAL, LESLIE C	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/617,113

Applicant(s)

CHOWN, DAVID

Examiner

Leslie Pascal

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 3,4,7-10,13 and 14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3,4,7-10,13 and 14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 3, 7-8, 10 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leuch 2191356, of record) in view of Bowen et al (4874218).

Leuch teaches an optical radiation source (3), an output transmission path (output of 3), an optical radiation detector (6), an input radiation path (input to 6), a loop back arrangement (path that goes through 5) which selectively causes the radiation by the source to at least partly propagate from the output path to the input path, and an attenuator (21 of figure 3). In regard to the "wherein" clause with regard to the function of the attenuator, when Leuch describes the attenuator, he teaches that it could be variably attenuating or ON/OFF switching. The on/off switching

Although Leuch does not teach specifics about the switch means that provides the loop back, Bowen et al teach plural switch means that provide loop back. He teaches that it is well known to us fiber (similar to Leuch, figure 3b) or reflectors/mirrors (figures 3a and 3c). In regard to claim 3, see figure 4 of Bowen et al. The mirrors are movable. It would have been obvious to use either mirrors or fibers as taught by Bowen et al in the system of Leuch since Bowen teaches that it is well known to use either in order to provide loop back. In regard to claim 14, although Leuch do not specifically teach that the circuit is arranged as a planar light wave circuit, it is well known to integrate circuits in a planar manner in order to avoid noise that is caused by elements integrated on different substrates and to provide better alignment. It would

have been obvious to integrate circuits in a planar manner in order to avoid noise that is caused by elements integrated on different substrates and to provide better alignment. In regard to claim 9, in that Leuch teaches that the amount that is coupled by coupler 4 is a proportion of the power from 4. It would appear that he would like a specific ratio. If using mirrors as taught by Bowen, the invention would still require a ratio of the signal to be split/passed through. In regard to claim 10, it would have been obvious to have an attenuator located between the source and the first loop back means in order to use fewer components. When the system is not in loop back, the attenuator could be used to control the signal that was sent over the communication system.

3. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Leuch 2191356, of record) in view of Bowen et al (4874218) in view of Hikmet et al (of record).

Although Leuch and Bowen et al do not teach specifics about the switch means that provides the a mirror that has controllable reflectance and transmittance, Hikmet et al teach that it is well known to use such mirrors. It would have been obvious to use such mirrors in order to avoid the use of moving parts. This would provide the benefit of avoiding the alignment problems required when moving parts as taught by Bowen and making the device simpler and more compact.

4. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Leuch 2191356, of record) in view of Bowen et al (4874218) in view of Fussganger (4910727).

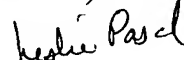
Although Leuch does not teach specifics about the switch means that provides an isolator connected to the source. Fussganger teaches that it is well known to use an isolator with an optical source to avoid reflected signals to be input a source/laser, which will cause noise. It

would have been obvious to use an isolator as taught by Fussganger in the system of Okamoto et al in order to avoid noise in the source.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leslie Pascal whose telephone number is 571-272-3032. The examiner can normally be reached on Monday- Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on 571-272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Leslie Pascal  
Primary Examiner  
Art Unit 2613